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Faculteit der Economische Wetenschappen en Econometrie

Serie Research Memoranda

Tourism and Strategic Development

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ABSTRACT

TOURISM AND STRATEGIC DEVELOPMENT

Tourism development covers a wide variety of topics. It does not only have economic impacts, but also broader social and environmental consequences. Therefore is it important to know the complex of economic, social, cultural/historical and environmental aspects of tourism. A strategic development has to be based on a coherent policy which is characterised by a clear understanding of these aspects and their interrelations.

In this paper, an integrated view on tourism and its regional implications is presented, based on an application for the island of Lesbos, Greece. The use of a comprehensive impact model offers a good overview of the interrelations between the various aspects mentioned above. This dynamic model is not only useful for scientific analysis, but gives also an opening for strategic development policy. In the case of Lesbos, this approach resulted in some scenario's which showed the impact of tourism development. It is completed by a systematic overview and evaluation of the policy issues.

Next the results of this case study are placed in a broader perspective. The result is a generalized model with strategic implications, because a balanced tourism development in the Mediterranean needs a policy which is based on operational insights in all its impacts.



Keywords: sustainability, conservation, scenario analysis, policy making

1 Introduction

Tourism has become a major source of income for many small island economies, but at the same time it has also some shadow sides which are often overlooked, especially in low income areas. The rise in income (the efficiency aspect) is usually generating socio-economic discrepancies (the equity aspect), while the inflow of the tourists and their behaviour may effect sustainability (the conservation aspect). The conflicting interactions between these main dimensions are summarized in figure 1.

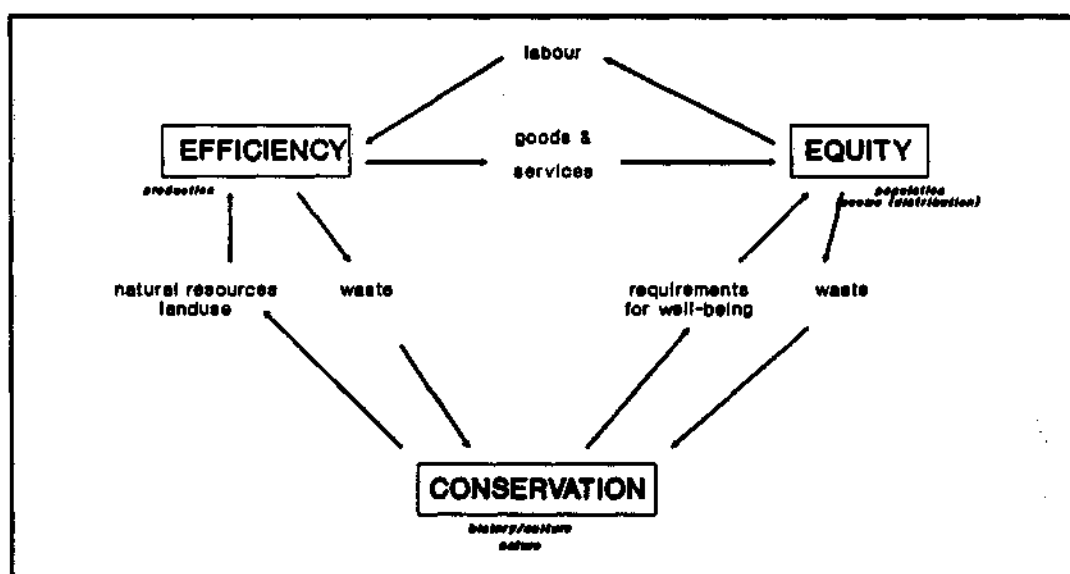


figure 1 Conflict Triangle Model

A balanced policy has to be based on a simultaneous consideration of all main dimensions. These dimensions are incorporated in the Conflict Triangle Model. This model forms a good basis for strategic development policy, while it is also useful for an appropriate analysis, based on insight in the main flows in society and scenario development.

The purpose of this paper is to present a practical application of the Conflict Triangle Model and its related Pentagon Model.

The conflicting interactions are even more severe for a small island economy, as this has special features. An island has, by definition, a limited size and is different from the mainland. Due to this smaller size, there are several characteristics which differentiates an island economy from the mainland. In general, these islands have:

- a) a narrow economic basis;
- b) limited natural resources;
- c) a small local market; and
- d) relative high costs of transportation¹.

Our study concerned the island of Lesbos, one of the larger Greek islands in the Aegean, for which a focussed tourism development is envisaged. The general economic impacts of tourism can be sketched by a model derived from Archer (1986) and presented in figure 2.

Tourism has a demand- and supply side, and even from the efficiency point of view it is determined by many factors. Tourist development is essentially a

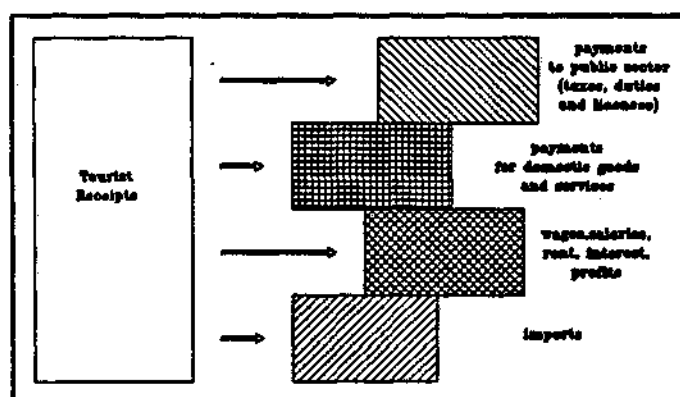


figure 2 Financial flows of tourism receipts

maximization problem: this means one has to find the right combination of all factors which influence tourism. To maximize the economic impact of tourism, four aspects need extra attention, according to Fitch²:

* government policies towards, and involvement in, the tourism-sector; policies have to be based on a long-term view. Short-term policies can

be disastrous in the long run;

* opportunities for discretionary expenditures, so that tourists can spend their money to a variety of items, and not only on hotels;

* the economic system; each leakage by importing goods means less income for the local economy; and

* inter-sectoral linkages; the various sectors have to support and supply each other.

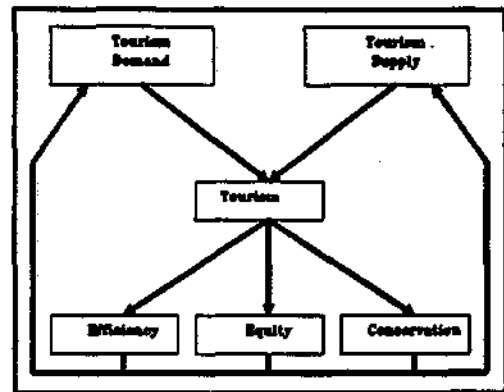


figure 3 Employment development

The various links between the three above mentioned policy goals (efficiency, equity, conservation) can now be incorporated for the tourist sector in the above figure (see figure 3), which will form one of the bases of our analysis.

2 The Island of Lesbos

Compared to most other Greek islands, Lesbos has a relatively small tourism industry. However, the potential for tourism development is more than sufficiently available.

The statistics describing the island are not always very reliable. Nevertheless, some indications can be presented on various socio-economics indicators.

First, some comparative data on population development will be given, by confronting Lesbos with Greece as a whole (see figure 4 and 5).

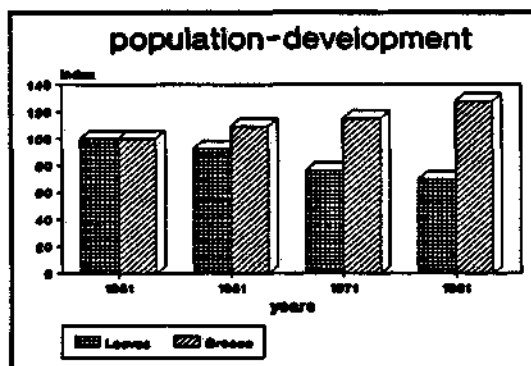


figure 4 Population development

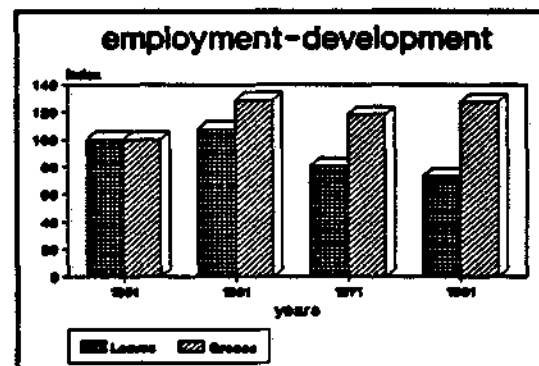


figure 5 Employment development

It is clear that Lesvos is performing relatively poor. Also the data on labour supply and employment for the island show a declining trend (see figure 6 and 7).

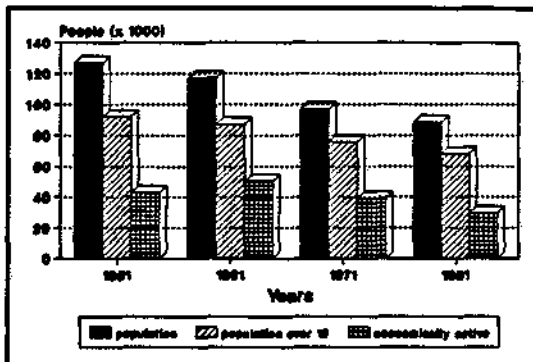


figure 6 Labour supply

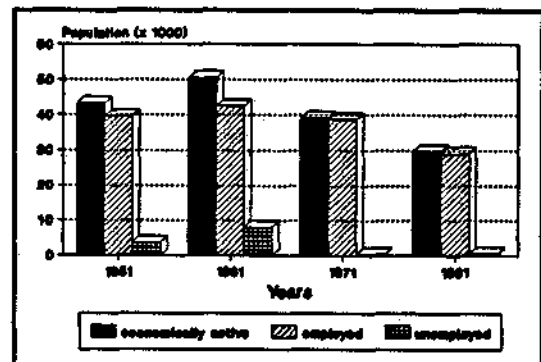


figure 7 Employment

The socio-economic basis of the island is also weak; see figure 8 and 9.

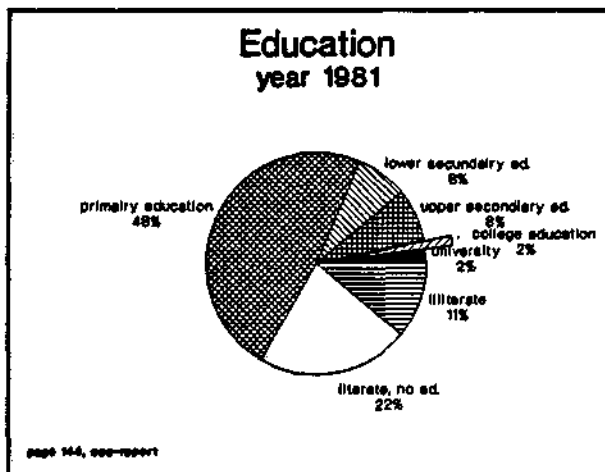


figure 8 Education

Because the economic structure of the island is not very strong and because the island has a good potential, the need for a strategic development policy is evident.

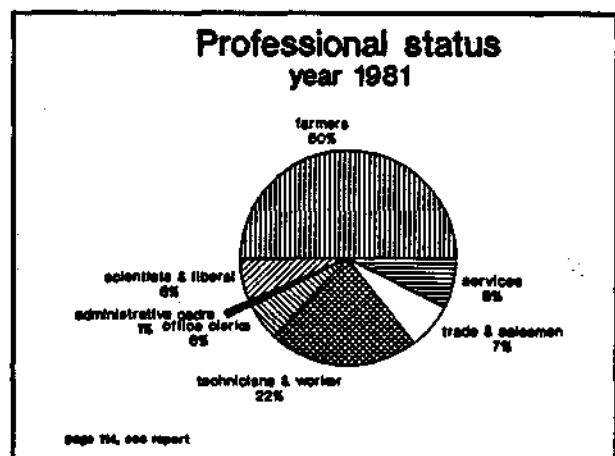


figure 9 Professional status

3 The Pentagon Model

Our analysis will use various scenario's for strategic policy choices. To be able to explore the impact of a scenario, the underlying policy choices should be shown. The so-called Pentagon Model will be very useful in this respect.

The Pentagon Model describes 5 critical succes factors for policy intervention. Here we will give a short explanation (see also figure 10).

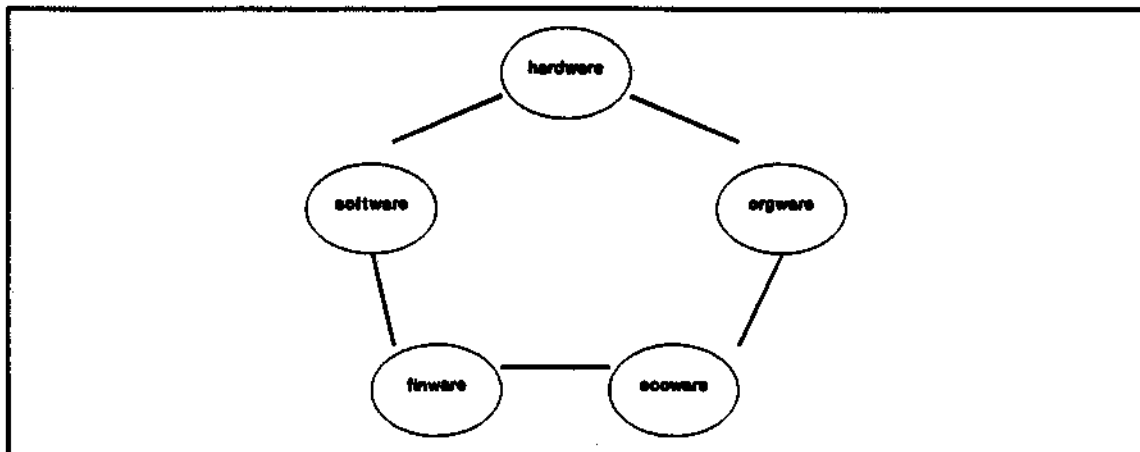


figure 10 Pentagon Model

1. **Hardware:** all aspects related to the physical environment are part of the hardware section; one can think of infrastructure (e.g. road network, capacity of airports, telecommunication), land use (size of areas for agriculture, tourism activities), etc.
2. **Software:** aspect related to human resources, social environment, education, etc. are software issues. Examples are labour potential, skills of employees, education level, relation network, etc.
3. **Orgware:** orgware" contains all policy issues in the field of organizational matters and the political system; important is the organization of the government (and the bureaucratic system) and the sectoral organization (unions, branche organizations, etc.)
4. **Finware:** "no business without money"; the financial issues are also an essential part of policy making; investment incentives, scholarships, subsidies, etc. are critical for the success
5. **Ecoware:** living beings are part of a complex ecological system, so this system is essential to implement in the decision making;

continuity requires attention for pollution, sewage systems, traffic, housing development, etc.

The Pentagon Model will now be used to evaluate various development scenario's for Lesvos, viz. an efficiency scenario, an equity scenario and a conservation scenario. The efficiency scenario will be described quite thoroughly. The other scenario's have been also prepared in a similar way, but will not be shown completely in this paper.

4 The Efficiency Scenario

This scenario is, like the other scenario's, based on a long term view: 25 years (1990 until 2015). It is worth to focus on tourism, and especially as the development of exclusive tourism. The diversity of the island can be a good source for development of this type of tourism, that is supposed to be the main economic activity of Lesvos (in this scenario). It has the advantage of a relatively large profit margin; it will strengthen the possibilities of the development of a good and reliable infrastructure, many services, etc., while the disadvantages in terms of pollution and annoyance are less than in a situation of "sun, sea, sand tourism". So, there will be some positive cumulative effects.

Lesvos in 2015

The main economic activities in this hypothetical scenario are:

- * a large number of small and luxury (high quality) hotels and pensions
- * 8 - 10 foreign villages; these villages count 200 - 500 houses and people who live in these villages are foreigners; they stay here during the whole year (no season problem) and in summer some of them may leave or otherwise rent it to tourists. These villages have their own (foreign) identity, shops, services, etc.
- * many villa's and other high quality houses will be rented
- * a large number of specialized restaurants, high quality taverna's, etc.
- * a few larger tourist centres for other types of tourism: sun, sea, sand; sports; it will be spread over about 3 locations with middle class hotels, beaches, bars and restaurants (not exclusive)

Lesvos 2005:

To reach the also described 2015 situation, many plans have to be realized already in 2005. The situation can be characterized as follows:

- * some good developed touristic areas with high quality hotels, villa's, etc. and restaurants, taverna's and other recreation facilities
- * 5 developed foreign villages, the others are planned to realized
- * supply of good financial, technical, medical services, etc.
- * the non-exclusive tourism centres are well developed (two of them at least, while the third one will be realized soon) and these types of tourists stay in these centres
- * less but modernized agricultural farms
- * started development of industrial areas
- * small scale but specialized fishing activities (also fishing for tourists)
- * broad spectrum of well organized activities, like some yearly high quality cultural events (festivals, concerts, theatre, etc.)
- * two small but modernized airports for public use
- * three well organized marina's with a good part for fishing
- * bigger new harbour is created
- * main roads are implemented, while some secondary roads are planned to be realized
- * reliable telecommunication network that connects the main centres
- * reliable water- and electricity-supply

The population will be about 130,000 people, with relatively more young and skilled people. The new activities cause a demand for skilled and educated people; partly it attracts people from other places but also the original inhabitants become better educated and skilled. This is the result of the new developments, and on the other hand it is one of the key factors for new developments.

It is clear that the next 10 - 15 years are of essential importance to reach the goals for 2015. The island has to get its own profile and the basis must be built for a good development. This needs a good policy, therefore due attention to the main policy issues will be given in the next part.

Policy issues

It is not our goal and nor do we have the capability to create a specific policy plan to fulfill the goals of this scenario. Hence, it more useful to stress some important policy issues. We want to make clear the broad impact of developments and the need for policies which are based on this broad complex.

To show the different aspects of policy making we have structured the issues in the above Pentagon Model: here it gets a more specified content. It should be noted that the importance of this model is stemming from the complexity of decisionmaking; all critical success categories are connected and form an essential part in a decision or policy.

Hardware

- * first of all there must be a clear policy about the land use. It is very important before starting many new activities that it is clear what areas can be developed in the long run and what function these areas will have.
- * the use of fishing grounds needs attention. Although fishing is not one of the main activities, it is important to continue this activity. This issue includes the function of the two gulfs (Kalloni and Gera) and the Aegean Sea.
- * decisions on the infrastructure have to be prepared very well; in more concrete terms it means paying attention to following issues:
 - development of an extensive and reliable telecommunication network
 - development of Mytilini as a centre for transport, distribution, services and information
 - the road network: a complete overview of the (potential) traffic flows is essential before realization
 - position, use and development of both airports
 - harbour planning: the marina's and fishery harbours as well as the big harbour need their own specifications and way of development

Software

In terms of human resources attention has to be paid to both the internal side and the linkages with the external side. First we discuss the

internal system:

- * one of the most critical factors of development of Lesvos is the labour potential. The goals cannot be reached when there are not sufficient people (the quantitative side) or when the labour potential is not well educated or does not have the right skills (the qualitative side); so it is essential to avoid frictions between the demand and supply of labour.

The qualitative side can be influenced by the available education possibilities; so an important policy issue is to build up a system of educational possibilities and pilot projects to have a qualitatively good labour potential in the future.

The quantitative side is another difficult issue; such a strong development as shown in this scenario will increase the demand for labour with a high percentage. This will be higher than the natural population growth of Lesvos. The result will be that:

- 1] people from other places (inside or outside Greece) will come to Lesvos
- 2] a part of the inhabitants of Lesvos who work in other sectors will change their job; this can cause new labour problems in these sectors. On Lesvos this creates serious problems in the agricultural sector.

This quantitative issue needs due attention; a structural solution is difficult, but an interesting potential is the group of Lesvos inhabitants who emigrated and are willing to come back.

The external system:

- * "to have a good product is one thing, to sell it is another thing"; business economics can be useful. Important is the network of external contacts and more specifically: the promotion of the island. A good marketing policy has to support the development, so this is another important policy issue.

Orgware

- * developments cannot be successful without a good organization. As written before, the agricultural sector has to be modernized, not only the techniques used, but also the organizational forms. This point needs attention in the policy and one has to take some

measures to initiate new and better organizations.

- * the internal organization of the government must be well organized, effectively and efficiently. A good realization of all activities, the planning, the control and sometimes adjusting the plans, all these tasks of the government require a good organization.

Finware

Each strategic development needs investments. Often it is one of the biggest problems to get the money right in time, so this aspect needs already in an early stage much attention. Realization cannot go on without sufficient financial resources. More practical it means that there must be a policy and legislation that creates a situation without financial problems, for example, with investment incentives. For some projects the government will be the investor, but most of the projects will be financed by private persons and companies or investment banks. It is useful to subdivide different types of projects and investments:

- * investments in accommodation: these investments will be done by private investors/banks and do not need many financial incentives, done by the government
- * investments in infrastructure: these more public investments have often to be initiated by the government. However, it is important to find more private investors for such projects. Infrastructure is very important for a good development, but usually the benefits will be earned in the long run. This is one of the difficulties in financing these projects; so it is an extra reason to pay attention to these kinds of investments.
- * investments in services, activities, etc.: the government can use financial resources for planning and starting several activities, services, etc. Some investments will be public, others private.

The main function of the government is not to give the money; it has a more regulating function. Sometimes it has an investors "role", very important is the regulating and stimulating role. Financial (or other) incentives can help the government in this function.

Ecoware

The use of natural resources has to be organized; the government is direct linked with this ecological organization. It has to look for the most efficient use of the natural resources, based on the continuity principle. More specifically this will include policy actions for:

- * cleaning the gulfs, which is important for fishing and tourism. No one will (and can) initiate such "cleaning projects"; this is an important role for the government.
- * systems for sewage treatment, etc. The development of the island will cause extra problems for sewage, so a good development in the long run needs a good sewage system. For many reasons it is more efficient to organize such projects centrally.
- * the erosion problems are very serious; although the causes are very complex, it is an essential policy issue.

5 The Equity scenario

There are many interpretations and meanings of the word "equity" possible, but in this scenario only two goals will be emphasized.

The first one is the possibility of self realization for everyone. Self realization in the sense that everybody is able to follow a proper and suitable education. In this scenario we focus for that reason on the development of a large set of education facilities. The first group of people we will aim at is the group of local people (inhabitants of Lesbos and the area around it), the second group is formed by people from all over the world. This second group is coming for commercialized high quality education.

The second goal is that everyone should have, within a reasonable distance, access to a high level of health care. At the moment there is a hospital in Mytilini, but this one does not satisfy this goal; for serious problems one has to go to medical centres in Athens. In this scenario we will emphasize the development of a good, well equipped and trustworthy hospital and a good network of medical services. It will be a large and specialized hospital. To be efficient, it will need a large population to care for. This can be found on the Greek islands, but it might be more efficient when the hospital would also serve the people

from the Turkish coast near Lesvos. This means of course, that there has to be a good connection between Lesvos and the Turkish coast.

So in this scenario Lesvos will develop into a regional centre for education and medical services: the main economic activities will be in this field. It will be clear that this cannot be the total of the economic activities, it also needs side activities. Therefore we have to look for synergy effects³, based on activities which will support or use the main economic activities. For that reason on the input side we can think about education for teachers, language education, etc. On the output side the knowledge can be used, resulting in activities like ecological farming, archaeology-tourism, etc.

In this way Lesvos will have its own economy, and its own specialized activities, based on a good balance of the various activities.

6 The Conservation scenario

Conservation can be roughly subdivided into two parts: conservation of the physical environment and conservation of the culture and history. Conservation of the physical environment is actually necessary in each scenario, because it is the basis for continuity. To make sure to leave something for future generations, taking care of the environment is inevitable. In this scenario this will be extra emphasized. The cube below will make it visible again.

We did not focus until now on conservation of culture and history. Culture is situated in people, buildings, art, attitudes, production, etc. The production is important in this scenario as a basis for economic activities; in this scenario the traditional production sectors will form the main economic activities.

However, conservation does not only mean a maintenance of old assets. It is important to change, to improve, but the basis has to be the environment and culture. For that reason we will combine in this scenario the traditional production sector with modern technologies and new ideas, but the aim is conservation of the environment. Ecological farming can be a good answer to the conservation requirements. The environment should not be overburdened. There has to be a good mix between culture and nature. Only if they go hand in hand it forms a good basis for future

development.

Finally we expect that continuing activities are better for the culture than seasonal activities (like tourism) and therefore we strive in this scenario for season constant activities.

7 The evaluation of the scenario's

We have shown three scenario's; each scenario has its own extreme orientation. None of them is a very realistic view on the future; however, our goal is to present some ideas. This paragraph makes this presentation more complete. We will evaluate the various scenario's to set our goals for a mixed scenario, which will be presented in the next section. The scenario's are qualitative and not quantitative, so it is impossible to show some assessments of the impact (in financial terms).

An evaluation has to be based on some criteria. For that reason we have selected six indicators, which give any idea of the impact of the various scenario's. The scale of these indicators gives a balanced overview of their impact, seen from the three respective concepts.

The indicators are:

1. Gross Regional Product
2. Employment
3. Income distribution
4. Level of education
5. Land for built environment
6. Level of cultural activities

The first two indicators stress the efficiency side; indicator 3 and 4 stress the equity side, and indicator 5 and 6 stress the conservation side. Here we will show only the results of the evaluation; this is done in the schematic overview below. The scales show for each scenario the "score" for all indicators. Most are indices, some are rates.

Results

1. Gross Regional Product:
the index for 1990 is: 100

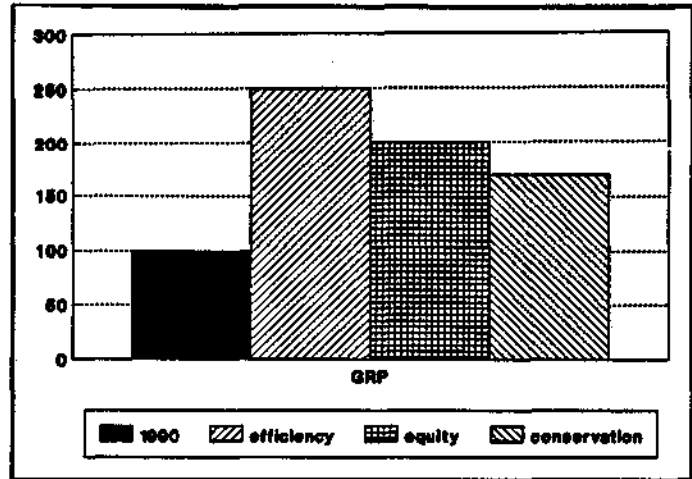


figure 11 Gross Regional Product

2. Employment:
1990: 47% of the population has an official job.

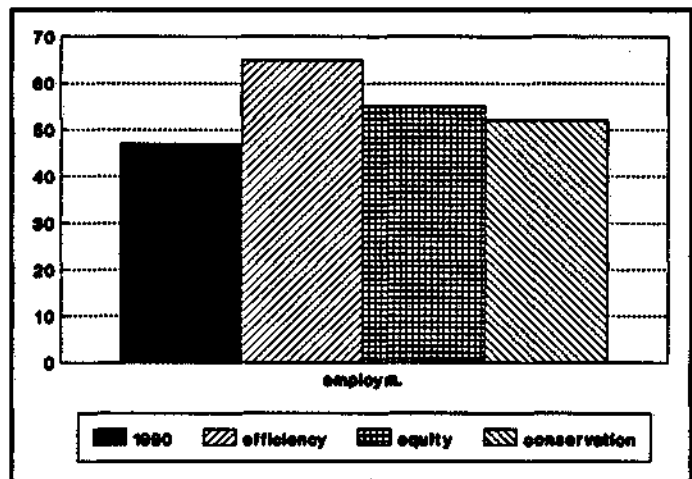


figure 12 Employment

3. Income distribution:
The index for 1990 is: 100.
One remark has to be made here: if the index is lower than 100, this means that the income is more equal distributed than in 1990.

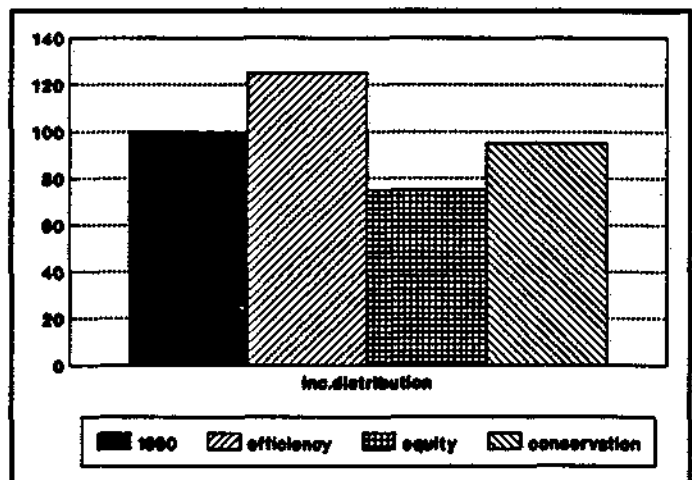


figure 13 Income distribution

4. Level of education:
1990: 20% has followed secondary school

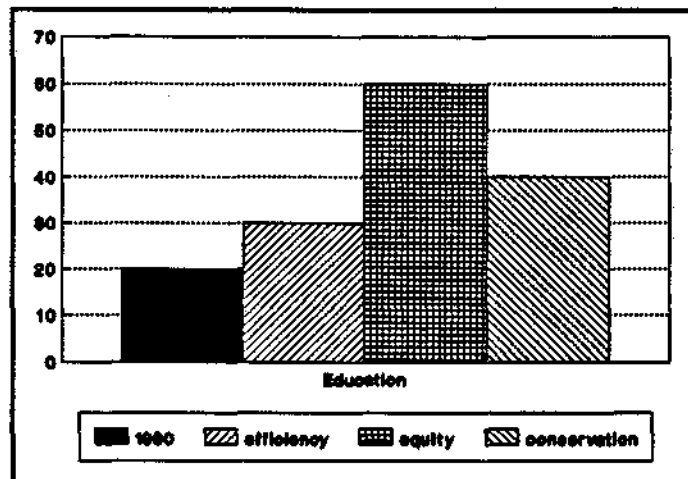


figure 14 Education

5. Built ground:
The index for 1990 is: 100

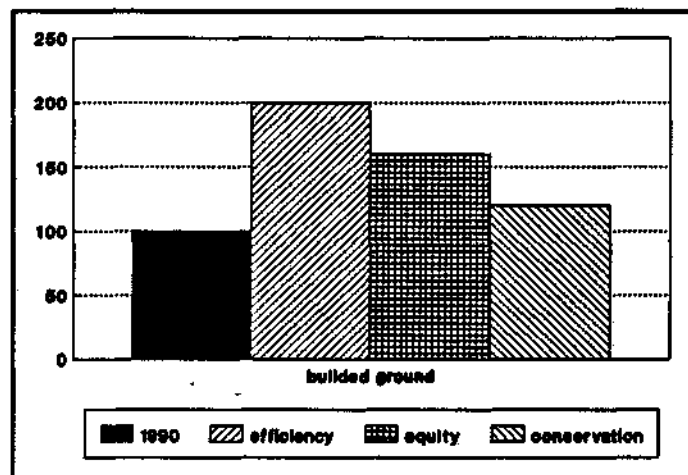


figure 15 Built ground

6. Level of cultural activities:
The index for 1990 is: 100

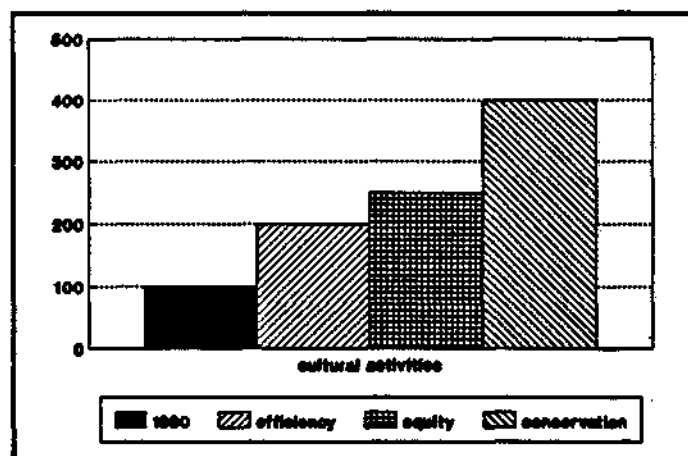


figure 16 Cultural activities

Now we have seen a global assessment of some indicators. It is clear that the efficiency scenario is very positive in the "efficiency indicators", GRP and employment. The equity scenario has better results in reaching a smaller income gap and a higher average level of education. The area of land for buildings is much larger in the efficiency scenario than it is in the conservation scenario. Striving for conservation will mean one has to strive for as little landuse for buildings as possible. From the conservation point of view it is good to stress the importance of our cultural heritage.

8 Conclusion: A Mixed Scenario

The three scenario's which we described before, are all focused on one of the three main concepts. However, it is important that a development is based on a broad view and we will now pay attention to all aspects simultaneously.

From this point of view we introduce in this scenario new development possibilities which are based on two principles:

- a) the proposed economic activities altogether should not just be acceptable, but even more than acceptable: positively valued from the point of view of all three concepts: efficiency, equity and conservation.
- b) the proposed economic activities are only acceptable when these have a positive influence on each other: the synergy effects!

For Lesvos a mixed scenario for 2015 has been designed, which is based on the following activities:

- network of conference centres (high profit margins, upgrading service and infrastructure network, upgrading education level, spread all over the year)
- specialized agriculture (products and process)
- education and archaeological institutions
- special exclusive tourism (a combination with conference centres)
- university and exchange projects with foreign universities
- fishing and agro-based industries

Like in the other scenario's, we showed in our study the necessary supplements (infrastructure, activities and services), as well as the spatial aspects. To reach the 2015 situation, the main goals for 1995 and 2005 are sketched. On the base of the Pentagon Model, a list of policy issues is made.

Crucial for a good strategic development and a positive role of tourism in the long term, is to find the right balance. The casestudy of Lesvos shows there are good possibilities. However, reality is very complex. The political process, changing international situations, natural factors, economic developments, etc.; all of them are influencing tourism and strategic development.

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Notes

1. See, EKISTICS(1987), pp. 85

2. PTRC-meeting July 1986, page 66

3. Synergy effect means that a combination of activities can yield more, than the sum of the separate activities. This leads to the conclusion that combining certain activities is worthwhile if there is a synergy effect.